

## **European Workshop**

on

# "The Challenges of EU' Enlargement on Science Literacy and Development"

20<sup>th</sup>-22<sup>nd</sup> January 2005, Corinthia San Gorg Hotel, Malta

In these times of enlargement consolidation and global affirmation of the European Union in the world, Education and particularly Science and Technology education play a role of major importance. If Europe is to grow socially and economically it has to ensure that it is on the forefront of scientific research, and Science Education has a decisive impact on the improvement of Science and Technology.

A sound Science Education beginning as earlier as at pre-school level is fundamental to a good development of fundamental skills the new generations will definitely need in order to cope with the requirements of a new Knowledge based economy and Society.

Efforts towards the improvement of Science' education should be generalized all over Europe aiming the sound establishment of a Science culture in our societies and to guarantee a steady basis for the improvement of Science and its technological applications. It urges to improve the quality and effectiveness of in-school Science learning. To do so one of the best paths is by leading school students to an active volunteer and committed participation in the teaching/learning process through hands-on practice and experimentation, making intensive use of the new instruments and resources of the Information Society.

The level and quality of Science and Technology literacy in the different EU countries is quite diverse due to political and/or developmental reasons. The importance of the enlarged establishment of a sound Science Literacy in modern societies is widely recognized. All over Europe a fast increasing lack of technicians, scientists, specialists and educators in Science and Technology, presents a major threat to our industry and to EU' development. This is mostly due to the current demographic trends in Europe and to the fact that most of our young students find the study and access to a career in Science extremely difficult and the prospect not rewarding and profoundly unappealing.

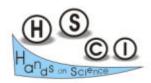
The recent enlargement of the European Union and the foreseeable incorporation in a near future of the candidate' countries, brings with it a number of challenges at economic, political and social but also educational levels. New problems arise but also new practices, new perspectives, and certainly new possibilities.

In the beginning of this new cycle, Europe has the opportunity to grow and take firm steps, by inducing a sound development of in-school Science Education through the stimulation and promotion of an extended use of hands-on experimental work in the classroom, towards the development of our Science and Technology leading to the fast sustained socio-economic development of our Society.

As part of a Socrates/Comenius3 project, the Hands-on Science network\* is promoting an international discussion forum on the issue of the enlargement of the European Union and the impact on a sustained development of Science and Science Education and Literacy. The University of Malta and the Education Division of the Malta' Government are partners in the organization of this high level meeting that also counts with the support of the Malta' Ministry of Education and Malta' Council for Science and Technology.

The forum aims to bring together: representatives of the European Commission and of the governments of EU countries and candidate' countries, members of national and European parliaments, politicians and policy makers, scientists, teachers and educators, employers and delegates from the industrial world. Both public sector bodies and the civil society will be represented. The forum will be practical in outlook, with a strong emphasis on comparing and discussing the status of Science and Technology Education in the Schools of the different EU countries, identifying problems and considering how they should be tackled. Developed should be realistic and far-reaching proposals effective in





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attracting our students into Science and increasing the proportion of them who remain active in the subject contributing to an increase of Science Literacy in our Societies and thus to an effective sustainable socio-economic development in Europe.

As Coordinator of the Hands-on Science network it is my pleasure to invite and welcome you to the European Workshop "The Challenges of EU' Enlargement on Science Literacy and Development", Corinthia San Gorg Hotel, Malta, January 20 to 22, 2005.

Universidade do Minho, Portugal, July 24, 2004.

Manuel Filipe Pereira da Cunha Martins Costa (Chair)

\*The HSci network (www.hsci.info) exists to promote the development of Science and scientific literacy in Europe. It encourages a generalized use of innovative hands-on experimental approaches to science and technology in-school teaching. In raising the profile and attractiveness of Science in education, we aim also to increase the desirability of a career in science for all.

#### **CALL FOR CONTRIBUTIONS**

Papers and other presentations may address, among other issues: School education and Science education policies; Science & Technology research policies; partnerships for improving Science and Technology education in an enlarged Europe; ways of forging partnerships in the EU to substantially influence the quality of science and technology education; Science and gender policies; programs for promotion of scientific literacy; methods of empowering science and technology teachers to work with quality improvement and what support measures EU can offer; hands-on learning of Science and new pedagogical tools; implications of enlargement and integration initiatives in the EU; case studies,...

English is the official language. Proposals are invited for oral presentations, workshop sessions or institutional presentation boots. Submissions and inquiries should be sent to the workshop' Vice-Chair: Suzanne Gatt, Faculty of Education, University of Malta, Msida MSD06, Malta, Tel. +356 23402926, Fax. + 356 21317938, suzanne.gatt@um.edu.mt. All accepted submissions will be published in CD format. Selected papers will be published in print.

Deadline for submission of abstracts: January 3, 2005

Notification of acceptance: January 5, 2005 Deadline for pre-registration: December 29, 2004

Notification of acceptance of registration: January 5, 2005

Final program available: January 10, 2005 Camera ready manuscript: January 8, 2005

#### **Oral Presentations**

Oral presentations may be between 15 and 40 minutes in duration. An abstract of approximately 300 words describing the main points and conclusions of the presentation may be submitted until January 3, 2004. It should include a front page with the title of the presentation, authors, presenting author, affiliation, proposed length of the presentation and special requests.

#### **Workshop Sessions**

It is planned to allocate between one and two hours for each workshop. However, proposals for longer workshop' session will be considered. An abstract of no more than 500 words, outlining the workshop objectives, format, content, and how the planned workshop meets the conference theme, must be submitted by December 8, 2004.

### Workshop fees

Regular Delegates School Teachers

200€(300€after December 29) 100€ (Fees will be waived or reduced upon request)

For further information and registration please contact the Local Organization (suzanne.gatt@um.edu.mt), or visit the Workshop' website at http://www.hsci.info/enlargement/ENLARGEMENT.html.

